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**COGNITIVE GROUNDS OF STRATEGIES IN MODERN
EDUCATIONAL PRACTICES**

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Abstract

Modern science exerts influence on all kinds of social practices, demanding complex ways of regulating knowledge and information from activity of scientists and specialists. In this connection, in the education sector, a new concept “education strategy” implies a general structure of actions and ideas in each particular case on the path to solution of the assigned task. Different aspects of this situation were combined into a complex of pressing problems of modern studies. One of such problems is a problem of cognitive grounds of strategies existence in educational practices. The objective of the research is to reveal correlation of knowledge and information as a factor, being a leading one in formation and evolution of educational practices. A methodological basis of the research is a concept of post-industrial society and its modern phase of development. Scientific knowledge as a main factor of production and consumption of information is identified. A concept that denote the inner organisation of educational practices, a target guideline in complex aggregates of theoretical and practical actions is an “educational strategy”. The result of the conducted research is a conclusion that the concept “education strategy” is adequate to “knowledge society”. In the framework of the innovative education strategy, knowledge has transformed into a main factor of production and application of information and provided the development of cognitive management. Appropriateness of usage the concept “education strategy” under condition of conducting scientific studies was substantiated, which determines the cognitive management existence. It represents a cognitive ground of social educational practices.

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1. Introduction

Science plays a special role in modern society. In the developed countries of the world, technological progress, based on application of its achievements, has led to a new quality of life. Science does not only revolutionize the production sector, but also exerts influence on all kinds of social practices, demanding complex methods of managing knowledge, information, means and methods of goal achievement from the activities of scientists and specialists. These changes concern the education sector as well. A cognitive situation in educational activities was precisely characterised by A.Yu. Storozhuk: “At present, social transformations, connected with the globalization increase in cultural and educational spaces, are evident. Globalisation requires development of vertical and horizontal social links, uniting a society. To realise globalisation, unification, understood as standardization of forms of communication, cultural skills and thinking, is necessary. Standardization is realised by means of corresponding formal methods, enhancing abstractedness of statement, since specific details, increasing richness of content, impede obtainment of universal judgments” (Storozhuk, 2016).

2. Problem Statement

In connection with abstract saturation of the content of educational practices, specialists in increasing frequency use the concept “education strategy”. In each specific case, it is summoned to reflect a general structure of actions and organising ideas on the path to solving one or another task. This term implies the presence of complex interactions in social practices both in the area of subjective-objective relations and in terms of correlation “knowledge - information”. Fundamentally new questions, arising in this case, have united into complex aggregates of pressing problems of modern studies. One of such problems, emphasized in this paper, is a **problem** of cognitive grounds of existence of strategies in educational practices.

3. Research Questions

From the analysis of West-European journal publications on the problem of educational practices it follows that the category “education strategy” is used very widely and constructively. This category helps a scientist, a teacher, a pedagogue to follow general logic of well-grounded actions, general organising ideas, structuring some creative process by its basic levels. The concept “education strategy” pertains to, for example, psychological training of students and postgraduate student’ memory and to development of argumentation skills in researches, and to adaptation of primary school learners to classes (Schwind et al., 2017; Roel et al., 2016; Paquette et al., 2016; Javier Gil-Flores et al., 2017; Schmidt, Brown, 2016).

4. Purpose of the Study

The **objective** of the research is to reveal the correlation of knowledge and information as a factor, being a leading one in formation of strategies of different educational practices.

The authors consider it necessary to identify two basic reasons, which in a decisive manner enable transformation of knowledge into a basis of production and application of information, and the term “strategy” – into one of the key, backbone concepts of educational activities.

First, this is promoted by the qualitatively changed correlation between knowledge and information. The modern innovative process has principally changed in social practices not only the mechanism of interaction of scientific knowledge with information flows. The most important thing that was subjected to a change in this interaction is a process of production and consumption of information. Until recently, its understanding was based on recognition of information as a single source, the only system link, by means of which global production and global market are organised. At that, scientific knowledge either was identified with information or was not accepted as an essential, inherently obligatory factor. But at present, a stable tendency has been outlined to differentiate knowledge in the general information flow, and to put it in a central position in the process of production and consumption of information. In foreign literature, the attention of scientists to the problem of correlation of knowledge and information increases steadily. This is explained by the fact that in the course of development of scientific-technical revolution, their role in all aspects of life of the modern world is broadening and deepening. At that, structural-functional characteristics of scientific knowledge, its integration capabilities become complicated. In its turn, development of technological and infrastructural peculiarities of information changes radically the image of social practices and societal relations on the whole. All this makes highly diverse both the subject scope of interaction of knowledge with information and the problem area of application of this interaction in the social-economic, humanity and scientific-educational sector of society life.

Let us consider certain mechanisms of complex interaction between knowledge and information (under the leading role of knowledge), based on the material of the review of one more group of publications. A paper by Karpov is distinguished in one of the foreign journals as a summarising research on this problem (Karpov, 2017). In it, the concepts “knowledge” and “information” refer to key categories of science, by means of which the understanding of complex processes of modern society transformation occurs. He pays attention to the problem of separation of these concepts in the context of the cognitive process, in the context of formation of society and formation of the education system. Knowledge (Karpov concludes) is not information; the definition of the concept of knowledge cannot be deduced from the concept of information, although information can facilitate knowledge creation.

As applied to the problem on perfection of the education system, a number of foreign scientists (Pattnayak, Pattnaik, 2016) indicate specialised education systems (with the support of web-services) in interactions between knowledge and information, which give users a chance to create editable contents in the form of different results of search in the framework of considerable knowledge bases. In the foreign publication of Kornienko (2016), factors of transformation of organisation forms in the education and science sectors are analysed; peculiarities of the society, based on knowledge as a sphere of its services, were studied. A process of knowledge status transformation in information society, as well as social-cultural consequences of interaction of knowledge and information, is considered in the terms of changing the nature of power relationships. At the same time, the author indicates the stages of development of

modern science in the context of development of information and communication technologies, models of informatization of the scientific process are analysed.

Many foreign scientific papers were devoted to the problem of knowledge classification, revelation of composite regularities in them, which can serve for improving the quality of information methods of management. In the same papers, much attention is paid to the problems of information service as an introduction of an additional mechanism, based on the knowledge domain and logic of scientific findings (Soleidy Rivero Amador et al., 2016; Jin et al., 2015; Mourtzis et al., 2016). Let us emphasize, for instance, the following experience of ecological studies in the area of using social-ecological science for preservation of marine environment (Leenhardt et al., 2015). In this paper, conceptual frameworks, applied approaches of simulation, and mission-orientated researches are synthesized to identify the social-ecological complex that informs specialists of ecological policy, nature management and administration. The authors believe that the experience of the “best practices” does not work in this case: there is a lack of the link of scientific researches for providing supervisors with up-to-date information. A similar theme is touched on in the paper, devoted to correlation of ecological science with practical programmes of environment protection (Leenhardt, Dixon, Harris, 2017). An important problem of understanding human motivations in the actions, connected with treatment of environment, is brought forth in the work of a large group of foreign scientists as well (Jones et al., 2016). Social sciences, in the opinion of this group of scientists, usually have data of population-based surveys at their disposal in the form of statistical reports and figures. Such form of studying the problem is ineffective. Therefore, scientists have developed a study programme of the visual interface, web-poll in order to obtain data on specific human motivations and actions, based on the visual processing of demographic parameters.

Thus, in the activity of all kinds of modern social practices, including an educational one, a necessity to build scientifically grounded (verified proceeding from the leading role of knowledge with respect to information) optimal connections and interactions. From our viewpoint, it is just the case that has stimulated the emergence of such mass phenomenon in social practices which became known as cognitive management. Cognitive management is responsible for managing information flows, for managing diversification processes of information flows and, consequently, the process of diversification of social interaction and social practices. It is subjected to a target content of the strategy, optimal logic of a sequence of steps for achieving a goal. Therefore, in our opinion, it can be perfectly attributed to cognitive foundation of any, including educational, practices.

The second of two reasons, which in a decisive manner facilitates transformation of the term “strategy” into a key, backbone concept in educational space, is connected with the necessity of introduction of one more new concept. Under condition of developed cognitive management, in our opinion, a clear-cut conceptual formulation of a general vector, purposefully uniting both the complex of unifying ideas and an inwardly unified sequence of actions, was required. The concept “educational strategy” served as such organising vector in the educational practice, a purposeful guiding line of its most significant practical results. This concept has been known in science and practice for a long time. However, under innovative conditions of education development, at the stage of existence of “knowledge society”, it conveys a qualitatively new meaning, generalizing the subject pattern of modern scientific knowledge along vertical and horizontal lines of interdisciplinary interactions.

5. Research Methods

The concept of post-industrial society and its modern phase of development – “knowledge society”- serves as a methodological basis of the study, conducted by the authors. In connection with the increased tendency to differentiate scientific knowledge in a general information flow and endow it with the leading role in the process of production and consumption of information, Russian scientist V.A. Kolpakov as early as 2008 rightly pointed out: “Hence a new characteristic of post-industrial information society as “knowledge society” appears, and its economy – as knowledge economy. A dominating role of science and engineering in the production processes of information, necessary for life activity of the society and being a source of its changes, including the change of the people’ life style, is considered as a determining feature of knowledge society (Kolpakov, 2008). At present, knowledge society implies a society, in the study of which incongruence of discourses of science, technology, culture and socium has been overcome. In other words, procedures of comparison of concepts “information society” and “knowledge society” must exclude “fuzzy” definitions, relating to simultaneously both kinds of indicated societies. In the knowledge society, scientists see a new social reality, which is characterised by such important features as strengthening of the role of the fundamental science as immediate productive force, an increase of the role of knowledge as a ground of individual and collective actions, emergence of political economy of knowledge, enhancement of the status of experts and groups of experts, etc.

6. Findings

Thus, let us emphasize the main results of the work performed. The concept “education strategy”, studied in the framework of the variety of existing educational practices, is adequate only to a modern stage of post-industrial society development – to the knowledge society. From the analysis of the West-European journal publications on the topic of educational practices it follows that the category “education strategy” is used very widely and constructively. This category helps a scientist, a teacher, a pedagogue to follow a general logic of substantiated actions, organising ideas, structuring of some creative process by its main levels. The concept “education strategy” pertains, for instance, to psychological training of students and post-graduate students’ memory, to development of argumentation skills in researches, and to adaptation of primary school learners to classes.

In the framework of the education strategy, knowledge (and in the first place, scientific knowledge) has transformed into a ground of production and application of information. Namely the leading role of scientific knowledge provides the development of cognitive management in social practices.

7. Conclusion

The authors of this paper substantiated the appropriateness of using the concept “education strategy” only under conditions of conducting scientific research of complex and relatively independent structures, included into educational practices. The need in active alignment of scientifically well grounded (verified based on the leading role of knowledge with respect to information) optimal connections and interactions inside social practices is typical for the education strategy. Namely under

these conditions, manifestation of the developed form of cognitive management, responsible for management of information flows, for development of the social diversification process, social interaction, is emphasized. Cognitive management is subjected to the target content of the strategy, scientific logic of goal achievement and is therefore classified by the authors of the paper as a cognitive ground in the sphere of educational practices.

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